

TABLE 3.—Late reports (instrumental).

Date.	Char-acter.	Phase.	Time.	Pe-riod. T.	Amplitude.		Dis-tance.	Remarks.
					A _m	A _N		

Alaska. *Sitka. Magnetic Observatory. U. S. Coast and Geodetic Survey. J. W. Green.*

Lat. 57° 03' 00" N.; long., 135° 30' 08" W. Elevation, 15.2 meters.

Instruments: Two Bosch-Omori, 10 and 12 kg.

Instrumental constants... $\begin{cases} E & 10 & 16.7 \\ N & 10 & 15.4 \end{cases}$

1917.		H. m. s.	Sec.	μ	km.
Nov. 16	en.....	3 31 34			
	en.....	3 32 54			
	el.....	3 50 30	32		
	M.....	4 02 56	32	20	
	F.....	5 38			

Massachusetts. *Cambridge. Harvard University Seismographic Station. J. B. Woodworth.*

Lat., 42° 22' 36" N.; long., 71° 06' 59" W. Elevation, 5.4 meters. Foundation: Glacial sand over clay.

Instruments: Two Bosch-Omori 100 kg. horizontal pendulums (mechanical registration).

Instrumental constants... $\begin{cases} E & 80 & 23 & 0 \\ N & 50 & 25 & 4.1 \end{cases}$

1917.		L. m. s.	Sec.	μ	km.
Nov. 24	L.....	12 11 31	20		
	F.....	12 21 47			

Missouri. *Saint Louis. St. Louis University. Geophysical Observatory. J. B. Goesse, S. J.*

Lat., 38° 38' 15" N.; long., 90° 13' 58" W. Elevation, 160.4 meters. Foundation: 12 feet of tough clay over limestone of Mississippi system, about 300 feet thick.

Instrument: Wiechert 80 kg. astatic, horizontal pendulum.

Instrumental constants... $\begin{cases} E & 80 & 7 & 5.1 \end{cases}$

1917.		S. m. s.	Sec.	μ	km.
Nov. 6	I.....	S.....	14 02 12		
		S.....	14 02 24		
		L.....	14 03 36		2,600
		F.....	14 08		
		F.....	14 10		
	7 I.....	eP.....	1 41 54		
		S.....	1 44 18		2,400
		S.....	1 44 30		
		L.....	1 45 18		
		F.....	1 45 30		
		F.....	1 52 00		
		F.....	1 52 06		

These were omitted from the regular report for November, 1917.

SEISMOLOGICAL DISPATCHES.¹

Idaho Falls, Idaho, December 12, 1917.

Distinct vibrations of the earth were felt here at 4 o'clock this morning. No damage was done. (Assoc. Press.)

New York, N. Y., December 27, 1917.

Guatemala City was partly destroyed by an earthquake on Christmas Day according to meager advices reaching here tonight. According to the message, the disturbance began late Tuesday night and was still continuing at 1 o'clock Wednesday afternoon. (International News.)

San Salvador, December 30, 1917.

Guatemala City has been completely destroyed by an earthquake. (Assoc. Press.)

Cable to Navy Department, December 30, 1917.

Bad earthquake yesterday finished the work of others. Everything in ruins and beyond description as a result of last night's shock. One hundred and twenty-five thousand people are in the streets.

¹ Reported by the organization indicated and collected by the seismological station, at Georgetown University, Washington, D. C.

Guatemala City, Guatemala, December 31, 1917.

Earth shocks that began here at 11 o'clock Christmas night, and are still continuing, caused millions of dollars of damage to this city, the death of a few persons, and injury of about 100 others. Every house in the city was rendered uninhabitable, and the entire population is living in the parks and open spaces. The first shocks were light, giving warning of the heavy ones that might follow. The devastation wrought was widespread. (Assoc. Press.)

EARTHQUAKES FELT IN THE UNITED STATES DURING 1917.

556.341 (73)

W. J. HUMPHREYS,

Professor in Charge of Seismological Investigations.

[Dated: Weather Bureau, Washington, D. C., Feb. 2, 1918.]

During the year 1917, 112 separate earthquakes strong enough to be felt were reported from different parts of the continental United States, as listed in the accompanying Table 1 and graphically represented (a dot for each report) on Chart XI (xlv-122) at the end of this issue of the REVIEW.

None of the 'quakes reported resulted in any appreciable damage.

'Quakes of moderate intensities, V-VI (Rossi-Forel), occurred in California on March 3, April 13, on six dates in May, and on August 19 and 28; at Panhandle, in Texas, on March 28; in northeastern New York on May 22, and in the State of Washington on November 12 and 14.

A 'quake of intensity VII on July 7 broke the Los Angeles aqueduct.

On April 9 a 'quake of intensity VI, central in eastern Missouri, was felt in 10 States. A second shock of intensity V followed the first 2 hours and 43 minutes later, and was felt in both Missouri and Illinois. This quake is discussed in detail by R. H. Finch in this REVIEW, April, 1917, pages 187-188.

On September 3 a 'quake of intensity VI was reported from 34 separate points in Minnesota, central about Brainerd, Lincoln, and Staples. This 'quake is discussed in detail by C. J. Posey in this REVIEW, November, 1917, pages 556-558.

TABLE 1.—Places in the United States reporting earthquakes during 1917.

[Consult also Chart XI (xlv-122) in this issue.]

Place.	Ap-proxi-mate lat-itude (north).	Ap-proxi-mate long-itude (west).	Num-ber of quakes re-ported.	Place.	Ap-proxi-mate lat-itude (north).	Ap-proxi-mate long-itude (west).	Num-ber of quakes re-ported.
ALABAMA.				CALIFORNIA—CON.			
Greensboro.....	32 41	87 32	1	Cedarville.....	41 32	120 08	2
Rosemary.....	32 40	87 30	1	Cloverdale.....	38 46	123 00	1
ARKANSAS.				Coachella.....	33 40	116 10	1
Black Rock.....	36 08	91 04	1	El Cajon.....	32 48	116 58	1
Corning.....	36 23	90 33	1	Eureka.....	40 48	124 11	3
Hardy.....	36 19	91 22	1	Fairmont.....	34 45	118 25	1
Marked Tree.....	35 32	90 22	1	Ferndale.....	40 35	124 16	1
Oseola.....	35 43	89 54	1	Fillmore.....	34 23	118 54	1
Paragould.....	36 05	90 25	1	Heber.....	32 45	115 31	1
Piggott.....	36 22	90 10	1	Hollister.....	36 50	121 20	1
Pocahontas.....	36 15	90 55	1	Indio.....	33 43	116 12	2
St. Francis.....	36 25	90 06	1	Jullian.....	33 05	116 39	5
CALIFORNIA.				Lakeport.....	39 04	122 56	1
Banning.....	33 58	116 52	1	Lone Pine.....	36 37	118 01	2
Barrett Dam.....	32 40	116 44	2	Los Angeles.....	34 03	118 15	2
Berkeley.....	37 52	122 16	3	Los Gatos.....	37 12	121 58	3
Bishop.....	37 22	118 24	4	Markleeville.....	38 48	119 46	1
Blythe.....	33 35	114 38	1	Mayfield.....	37 23	122 05	1
Boulevard.....	32 38	116 15	1	Mecca.....	33 34	116 05	2
Brawley.....	33 00	115 31	4	Mesa Grande.....	33 11	116 45	1
Cahulla.....	33 32	116 45	4	Mojave.....	35 03	118 12	1
Calexico.....	32 41	115 30	22	Mount Wilson.....	34 13	118 04	3
Campbell.....	37 17	121 57	1	Neenach.....	34 47	118 37	1
Carmel.....	36 34	121 56	1	Nellie.....	33 22	116 52	1
				Nordhoff.....	34 35	119 14	1
				Ojai.....	34 25	119 12	3
				Olancha.....	36 15	118 00	1
				Owensyo.....	36 40	118 01	1